

3.13 Traffic and Circulation

This section assesses potential traffic and circulation impacts on the basis of information supplied by DWR, the Riverside County Transportation Commission (RCTC), Caltrans, and the City of Perris, Department of Engineering.

The following were considered in the assessment of potential impacts:

- Review and evaluation of documents, plans and aerial photographs to determine the characteristics of roads that are proposed to accommodate construction-generated vehicle trips. Characteristics included the number of travel lanes, traffic control, on-street parking (permitted or prohibited), bicycle routes, transit service (including bus stops), and land uses served by the affected roads (e.g., sensitive uses like fire stations, schools, etc.)
- Automatic (24-hour) traffic volume counts on the Ramona Expressway. Counts taken on a weekday and used to estimate typical daily and peak hour traffic volumes.
- Estimated highest number of vehicle trips that project-related activities would generate, on both a daily and peak hourly basis.

3.13.1 Setting

The project area lies within unincorporated Western Riverside County. The roadway network on which construction workers and construction vehicles (including trucks that would transport equipment and fill material to and from the worksite) would travel to access the site consists of regional highways and local roadways (see Figure 2-2).

Existing Traffic Circulation Network

Regional Roadways

Interstate 215 (I-215) is a north-south freeway bypass that connects the cities of Murrieta and Sun City to the south of the project site and Moreno Valley, Riverside and San Bernardino to the north. I-215 provides full access ramps with the Ramona Expressway approximately five miles east of the project site. State Route 60 (SR-60) is an east-west freeway north of Lake Perris that runs from Interstate 10 (I-10) near the Los Angeles River in Los Angeles east to I-10 in Riverside County, with an overlap at I-215. State Route 74 (SR-74) is an east-west freeway that connects Interstate 5 (I-5) in San Juan Capistrano (Orange County) east to Palm Desert (Riverside County). SR 74 is to the south of the project site and passes through the City of Perris.

Local Roadways

The Ramona Expressway is a four-lane east-west arterial which runs from I-215 in Perris to SR-74 in Hemet. The Expressway follows the contours of Lake Perris on its south shore and provides access to the project site at Bernasconi Road. Bernasconi Road provides access to the lake's south shore recreational facilities which include group campgrounds, picnic areas, a multi-use path and rock climbing areas.

Local roadways would encounter a lowered level of use due to the decreased visitorship at Lake Perris SRA, caused by the drawdown of the lake.

Traffic Volumes

Automatic machine traffic counts were conducted by the City of Perris, Department of Engineering over a 24-hour period on the Ramona Expressway.¹ The results indicate that there are about 17,465 vehicles per day (vpd) on weekdays. Weekday peak-hour traffic volumes are about 1500 and 1280 vehicles per hour (vph) during the a.m. and p.m. peak hours, respectively.²

The most recent data published by Caltrans indicate the average daily traffic volume on SR 60 near Perris Boulevard is about 86,000 vehicles, with about 10.5 percent trucks. The average daily traffic volume on SR-74 in the vicinity of I-215 is about 20,000 vehicles with 10 percent trucks. I-215 just south of the Ramona Expressway is estimated at 104,000 vehicles, with 12 percent trucks (Caltrans, 2007b).

Transit Service

The project area is served by Riverside Transit Agency (RTA). RTA buses number 19 and 41 run on the Ramona Expressway (with stops at Evans Street), but have no stops near the project site.

3.13.2 Regulatory Framework

The development and regulation of the transportation network in the vicinity of the proposed project primarily involves state and county jurisdictions. Applicable state and local laws and regulations related to traffic and transportation issues are discussed below.

County of Riverside

The proposed project is located within unincorporated Riverside County and is governed by the Riverside County General Plan. The Circulation Element of the County General Plan includes policies for transportation planning and development of facilities to support development in a manner that addresses a move from sprawl to more concentrated urban development (Riverside County, 2003).

Congestion Management Program

Riverside County also supports the Riverside Congestion Management Program (CMP), created in compliance with Proposition 111 that aims to more directly link land use, transportation and air quality to promote reasonable growth management programs. The purpose of the state-mandated CMP is to monitor roadway congestion and assess the overall performance of the region's transportation system. Based upon this assessment, the CMP contains specific strategies and improvements to reduce traffic congestion and improve the performance of a multi-modal

¹ Estimated daily traffic volume is based on automatic machine counts conducted on Wednesday, March 15, 2006.

² Weekday traffic typically has two peak hours, which correspond to the morning and evening commute hours (during the two-hour periods of 7:00 to 9:00 a.m., and 4:00 to 6:00 p.m.).

transportation system. Examples of strategies include increased emphasis on public transportation and rideshare programs, mitigating the impacts of new development, and better coordinating land use and transportation planning decisions.

Destination 2030: 2004 Regional Transportation Plan

Destination 2030 is SCAG's 2004 RTP for its member counties. The RTP focuses on improving the balance between land use and current, as well as future transportation systems. SCAG develops, maintains and updates the RTP on a three-year cycle.

California Department of Transportation

Caltrans manages interregional transportation, including management and construction of the California highway system. In addition, Caltrans is responsible for permitting and regulation of the use of state roadways. The project area includes roadways that fall under Caltrans' jurisdiction (e.g., I-215, SR-60, and SR-74).

Caltrans' construction practices require temporary traffic control planning "during any time the normal function of a roadway is suspended" (FHWA, 2003). In addition, Caltrans requires that permits be obtained for transportation of oversized loads and transportation of certain materials, and for construction-related traffic disturbance.

3.13.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR and consistent with Appendix G of the *CEQA Guidelines*, a project that would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system is considered to have a significant impact on the environment. The project is also considered to have a potentially significant impact if:

- Traffic generated by construction workers and construction vehicular activities substantially affects roadway traffic flow, especially during peak traffic hours;
- Construction activities pose a traffic safety hazard to motor vehicles, bicyclists, or pedestrians;
- Construction substantially affects parking availability, causing traffic safety/operational problems;
- Construction activities significantly affect local transit service;
- Movement of heavy vehicles causes substantial damage or wear of public roadways; or
- Construction activities affect air traffic patterns and result in substantial safety risks.

Wear of Public Roadways

The use of big trucks to transport equipment and material to and from the project worksite could affect pavement conditions on the designated haul routes by increasing the rate of road wear. The

project's impacts are expected to be negligible on I-215 and the Ramona Expressway since no substantial soil hauling activities off-site would be required.

Transit Services

The project would not disrupt local roadways or affect transit services.

Air Traffic

The project is located over four miles from the nearest airport. The project would not disrupt air traffic.

Parking

The project would not reduce parking at the Lake Perris SRA. No additional parking demand would be created by the project. Construction parking would be provided within designated construction zones.

Local Traffic Hazards and Congestion

The proposed project would not cause long-term effects to local traffic because, once completed, the dam would only require maintenance activities similar to those that occur under existing conditions.

Impact 3.13-1: Construction activities would result in short-term increases in vehicle trips by construction workers and construction vehicles.

Trip Generation and Distribution

During the project construction period, project traffic external to the site would be generated from two sources: truck trips to and from the worksites, and personnel (construction work crews and supervisory staff) working at the sites. Most project-generated traffic would access the sites off the Ramona Expressway from I-215. Almost all of the truck trips would be inbound trips to deliver materials and equipment, and outbound empty trucks. Other truck trips would include the initial delivery of construction vehicles and equipment used to haul material from the borrow area and rock quarry to the construction sites (which would generate project traffic internal to the site).

The workforce for the project would generate auto commute trips. The number of personnel and associated trips would vary over the construction period, but is estimated to average about 60 people over the course of the project, with a maximum of up to about 120 people.

The following assumptions were made as part of the trip generation estimate, based on construction traffic estimates presented in Chapter 2, Project Description:

- Basic construction materials (soil and rock) would be excavated and quarried from within the site.

- All trucks used to haul material from the borrow area and rock quarry would be left on-site; truck drivers would come to the site by personal vehicles.
- Cement used in the CDSM operations and construction of the outlet tower and the emergency outlet extension would be imported in bulk by tanker trucks of 25-ton capacity.
- Public access to the south shore area would be generally controlled and limited when necessary during project construction.

The intensity and nature of the construction activity would vary over the duration of the project construction period, and the number of vehicle trips generated by that activity would similarly vary. Based on information provided in Chapter 2, Project Description, the peak number of daily vehicle trips would be about 1520 one-way trips (270 one-way worker trips, and 1250 one-way truck trips). It is noted that of the peak period 1250 daily truck trips 30 percent (375 one-way trips) are estimated to be external trips to and from the site. The remaining 875 peak daily one-way trips would operate on-site hauling soil and rock from the borrow area and rock quarry to the project sites. On-site trucks would also haul excavated materials between the three project sites. Because the truck trips would be spread over the course of a 12-hour work day, the project would generate about 105 one-way truck trips per hour overall and about 32 one-way truck trips to and from the site per hour. There would be a maximum of about 135 one-way worker trips in the morning and 135 one-way worker trips in the evening.

Project Effects on Traffic Flow

Construction-generated traffic would be temporary and therefore would not result in long-term degradation in operating conditions on area roadways or at area intersections. As stated above, the number of vehicle trips generated by construction activity would vary over the construction period in step with the intensity and nature of that activity. The estimated increase in traffic volumes caused by project-generated traffic would not be substantial relative to background traffic conditions, nor would project traffic significantly disrupt daily traffic flow on area roadways.³ Project-generated truck trips would be spread over the course of the work day, and construction workers would commute to and from the worksite primarily before or after peak traffic hours.

The highest level of truck traffic would generate an average of about one truck every two minutes, and project-generated traffic (trucks and worker vehicles) would increase the daily traffic volume on the Ramona Expressway by less than four percent, and by less than one percent on I-215. These percent increases in traffic volumes would not be substantial, and project traffic would not significantly disrupt daily traffic flow on these roadways.

Construction-related truck traffic occurring on roadways in the peak direction during the weekday peak traffic hours would coincide with peak hourly traffic and would have the greatest potential to impede traffic flow. The primary impact from construction truck traffic would be a temporary and intermittent reduction of roadway capacities due to the slower movements of trucks

³ Day-to-day traffic volumes typically vary by as much as 10 percent (i.e., plus-or-minus five percent), and an increase of less than that is unlikely to be perceptible to the average motorist.

compared to passenger vehicles. Drivers could experience delays if they were traveling behind a construction truck.

Level of service standards for roadways that are part of the CMP network (e.g., the area freeways) are intended to regulate long-term traffic increases from operation of new development, and do not apply to temporary construction or demolition projects such as the proposed project. Therefore, the proposed project would not exceed level of service standards established by the Riverside County Transportation Commission for designated CMP roadways.

The relatively low level of construction-generated traffic and reduced visitorship during the drawdown, combined with implementation of Mitigation Measure 3.13-1 would result in a less-than-significant traffic impact.

Mitigation Measures

Mitigation Measure 3.13-1: The following requirements shall be incorporated into contract specifications for the project:

- The contractor(s) shall prepare and implement a traffic safety/traffic management plan, which would establish, at a minimum, the process for notification of construction activity and the means for people to report problems during construction. The plan would be made available to the public. Elements of the contractor's plan shall include, but are not necessarily limited to, the following:
 - Provide a schedule of deliveries over the construction period showing the estimated number of trucks traveling to and from the project site during the different phases of the work. Provide updates of estimated truck traffic volumes as construction proceeds. Encourage off-peak hour deliveries.
 - Comply with roadside safety protocols. Provide advance "Road Work Ahead" (and other appropriate) warning signs to achieve required speed reductions for safe traffic flow (including turning movements between the Ramona Expressway and the main access roads) into and out of the work site.
 - Promote carpooling and use of public transportation for workers traveling to the construction site.

Significance after Mitigation: Less than Significant.

Impact 3.13-2: Construction activities could affect traffic on Ramona Expressway, Evans Road and Lake Perris Drive as well as on roads within the Lake Perris SRA. Some road closures would occur within the Lake Perris SRA for the duration of construction.

The project would not alter the physical configuration of the existing roadway network serving the area and would not introduce unsafe design features. In addition, there would be minimal conflicts between project trucks and private vehicles on the Lake Perris SRA access road (Bernasconi Road). Continued use of trails and other recreation activities would be allowed during most of the proposed project construction period within the Lake Perris SRA, but activities near the construction zone such as rock-climbing, hiking and fishing would be temporarily closed

during construction. Figure 2-8 shows the approximate limit of the construction zone closure area that would be in place for the duration of the construction period.

Traffic control measures, such as use of flaggers, would be implemented under the proposed project to ensure safe traffic flow within the Lake Perris SRA. In addition, during periods when construction equipment utilized the neighboring roadway network including Ramona Expressway, traffic control measures would be employed. No full road closures would occur outside of the Lake Perris SRA.

Mitigation Measures

Mitigation Measure 3.13-2a: DWR shall post signs at closed roads indicating the closure schedule and alternate routing for recreational and regular access. In addition, closure notification shall be posted on the DWR and Lake Perris SRA websites.

Mitigation Measure 3.13-2b: DWR shall prepare a traffic control plan that identifies specific traffic control measures to ensure safety on the local roadway network and within the Lake Perris SRA. Control measures shall include use of flaggers within Lake Perris SRA if construction vehicles utilize Lake Perris SRA roads and trails outside the construction exclusion zone.

Mitigation Measure 3.13-2c: Peak travel periods shall be avoided when scheduling road closures.

Significance after Mitigation: Less than Significant.

Airport Safety Zone

Impact 3.13-3: The construction activity is located within the March Air Reserve Base Safety Zone Area III that could pose air traffic safety conflicts.

The March Air Reserve Base is located to the northwest of the project site. The boundary of the Airport's Influence Area includes the Lake Perris Dam and project site. There are a number of safety zones associated with the Airport Influence Area, and properties within these zones are subject to regulations governing such issues as development intensity, density, height of structures, and noise.

The project site falls within Safety Zone Area III. This zone has no restrictions on population density, however it limits coverage by structures to a maximum 50 percent of gross or 65 percent net of parcel square footage and discourages schools, auditoriums, amphitheaters, stadiums and discourages land uses involving, as the primary activity, manufacture, storage, or distribution of explosives or flammable materials.

Project construction activities would not exceed the existing maximum elevation (1600 feet) in the project area. The replacement outlet tower would be only slightly higher than existing grade and the height of the dam would not be altered by the proposed repairs. The project would include

the use of explosives at the rock quarry and outlet tower sites and the use and limited storage of fuels (flammable materials) in the area. The use of these materials would be controlled, limited and temporary and would not violate the requirements of the Airport Influence Area Policies.

Significance: Less than Significant.

Summary of Impacts and Mitigation Measures

Table 3.13-1 presents the impacts and mitigation summary for Traffic and Circulation.

**TABLE 3.13-1
TRAFFIC AND CIRCULATION IMPACTS AND MITIGATION SUMMARY**

Proposed project Impact	Mitigation measure	Significance after Mitigation
Construction Vehicle Trips: Construction activities would result in short-term increases in vehicle trips by construction workers and construction vehicles.	3.13-1	Less than Significant
Public Roadway Traffic: Construction activities could affect traffic on Ramona Expressway, Evans Road and Lake Perris Drive as well as on roads within the Lake Perris SRA. Some road closures would occur within the Lake Perris SRA for the duration of construction.	3.13-2a through 3.13-2c	Less than Significant
Airport Safety Zone: The construction activity is located within the March Air Reserve Base Safety Zone Area III that could pose air traffic safety conflicts.	None required	--